

### 2005 Year in Review

What an action packed year for the club as we got in motion this year!

We began the year meeting almost every Wednesday for lunch in the cafeteria to discuss upcoming events, test out our station, and to connect with other Motorola Hams. We practiced our operating skills during several weekend contests: ARRL-DX, ARRL-Field Day, ARRL Sweepstakes.

There were a variety of events we participated in appealing to the diverse interests of the club: International Space Station Transmission with Fairview School, Take your Child to Work Day, Dayton Hamvention, Field Day Demo on Campus, Field Day on the Schaumburg Campus with N9MOT and tour of the Motorola Archive Museum. Our monthly meeting topics included Satellite Operation, Home Brew projects. Club members, rebuilt the HF Vertical Antenna, construction of a 160 Meter Long Wire Antenna, and documenting the club operation procedures so all can get on the air.

It was exciting to encourage and welcome 6 newly Licensed Hams. The year was filled with developing skills, enhancing the station performance and building relationships within Motorola and the community thru our contacts.

Here are some snapshots highlighting some of the key club events!

[All photos are posted at <u>www.km0to.shutterfly.com</u>]

### **ARRL Sweepstakes**



Jerry N9GG0, Ricardo PY2RMI, Les KC9HIH



Kathy KC9HIF, Jerry N9GGO

This year for Sweepstakes, we had three new operators. Les and Kathy were not licensed last year and Ricardo was visiting us from Brazil. Our operation was a bit more casual as we enjoyed making contacts in the US and operating the station. This year, we were able to contact Delaware and Saskatchewan two sections we missed last year.

### 103 Q's x 58 Sections ==> Total Score: 11,948

### 160 Meter "Top Band" Update





We installed an antenna for the 160 meter band. The 160 meter band is sometimes called "Top Band" because of the long the "Gentleman's wavelength, or Band" because of the friendly operators and the informal band plan that everyone follows. But due to the large size for a 160 antenna, many hams aren't able to afford the space for one and miss out on it. Fortunately for us, we have a lot of space on our roof, so a 160 meter antenna looked feasible. We had approval from Facilities to use an existing support on the roof, which happens to be a little over a half-wave away from our existing antennas and coax feed. After looking at several different arrangements, we decided to try a very traditional design, an end-fed Zepp antenna.

The Zepp, short for Zeppelin where it was first used, is a half-wave end-fed antenna. It is a little tricky because the end-feed is a high impedance, high voltage point, which requires a matching circuit. The classic Zepp is fed with open wire line down to a





Matching network

260 feet of Antenna Wire

tuner. Because we have coax running to the roof, we moved the matching circuit up to the feed point. Les Mutz, KC9HHB and John Boos K0HVS, devised an auto transformer match mounted in PVC pipe for weatherproofing. Les spent time winding the coil, and matching it with the network analyzer on the bench.

We mounted the matching network on its own mast next to the HF vertical. The south support is a 19-foot mast clamped to the existing mount on the roof. Between the two supports is 260 feet (that's about 1/20 of a mile) of 18 gage copper-weld wire -- the wire is so thin that it is nearly impossible to see it from the admin building windows.

The antenna has been tuned to put it right on frequency, and we made our first contact on December 2 with K9JDM on the 160 net. We received a great signal report, with loud received signal levels on the band. A new vision accomplished!

## Antenna repair team project



Les KC9HHB, Mike KC9HUU, Fred KG9X

Trap Damage

Strong wind damaged the traps shorting out the antenna system. Club members identified the damaged coils and repaired the antenna.

## Tour of the Motorola Museum Archives by the Schaumburg MARC Club K9MOT



The Archives of Motorola



Now this is what they call a Brick Phone... Try and get this in your jeans pocket!

Schaumburg Motorola Amateur Radio Club tour of the Archives and Collection at the Galvin Center, see photo's posted on the Clubs Compass Site: http://compass.mot.com/go/marcclubevents

Additional Motorola Heritage Resources available at: <u>http://history.mot.com/</u> and <u>http://compass.mot.com/go/heritage</u>

Thanks to Motorola Amateur Radio Club, N9MOT, in Schaumburg for sharing a part of Motorola History!

## Libertyville Campus Field Day Demo



Portable Club station set-up in the cafe



Benny AG9U, Fred K9SA, Richard KC9HIH

### Field Day Motorola Schaumburg Campus



Kathy KC9HIF, Jerry N9GGO, Adrian AA5UK



Field Day Crew



**Future Hams** 



Jerry N9GGO, Kent K9KMD, Adrian AA5UK

## **Club Meeting on Home Brew Projects**



May Club Meeting

Steve N9SRB - Wayne AA9DY

Steve K9SRB described a few of the kits displayed during "Take Your Child to Work Day"

## Trip to Dayton -- Hamvention 2005



Adrian AA5UK



K9MOT-- obtaining of latest equipment at Dayton



**Outdoor Flea Market** 



Indoor Hara Arena

### Take Your Child to Work Day in the Libertyville Campus on April 29



Kids enjoying Ham Radio

The Club raised the awareness of Amateur Radio for the Kids and Motorola parents. It was exciting seeing the interest the Kids had in the hobby as they asked questions, tapped out their name in Morse code, talked on the Radio, explored building electronic projects, and building relationships in their community and internationally.

The Kids and parents walked out of the room talking about Amateur radio and how



Adrian AA5UK, Wayne Estes W9AE

they could share this family hobby together. Mission accomplished due to a determined team! Thanks again everyone for investing your time to spread the word about Amateur Radio.

See photos of our "Take your Child to Work Day" on our compass site: <u>http://www.km0to.shutterfly.com</u>

## New Technician Hams



New Technician with their Ham Tickets attending class

Congratulations to the following Motorolan's!

KC9HIF - Kathy Kumorek-Breuss KC9HIA - Clay Lambert KC9HUU - Mike Cooksey KC9HIH - Richard Wasserman KC9HHB - Les Mutz KC9ILG -Alex Bahk

International Space Station transmission with Fairview School on February 10



Adrian A5UK, Les KC9HHB, Jerry N9GGO, Fred KJ5VC, Wayne W9AE, Ken KW9U, Wayne AA9DY, Howie K9KM

Club members gathered on the front lawn of Motorola and heard the International Space Station transmission between ISS astronaut Leroy Chiao and Fairview Elementary School in Mount Prospect. The transmission lasted 8 minutes as we monitored the downlink by positioning the handheld "Arrow" antenna from north to south following the pass of the Space Station. The rebroadcast of the ISS was also made possible using IRLP for all to hear thanks to Schaumburg MARC members and the N9EP repeater.

More information at: http://www.dist57.org/NASA/contact.html

### **Club members activities**



Howie Huntington, K9KM, wrote an article in the National Contest Journal regarding contesting activities at the W9DXCC Convention. Read the article posted on the club's website: http://compass.mot.com/go/153397048

Howie is KM0TO's Trustee, a member of Northern Illinois DX Association who sponsor W9DXCC, and also the ARRL Central Division Vice Director should you have any question contact Howie or visit this website: <u>www.central.arrl.org/vice\_director.html</u>

Chad Kurszewski, WE9V, invited club members to operate his contesting station for Sweepstakes; see Chad's website: <u>www.we9v.com</u>

Wayne Wagner, AA9DY, was awarded 1st on 40M/W9/Single-Op in the CQ World Wide RTTY WPX contest.

## **KM0TO Station Antenna's:**



HF Vertical MFJ 14 AVQ, 160Meter wire windy day!



VHF/UHF Comet GP-9, 80 Meter dipole

**Clubs QSL Card** 



### Start of the year: Signing of the Club Constitution



Charter Members at the November meeting: (Front L→R) Les Mutz, Jerry Breuss/N9GGO, Keith Landowski/KC6VMM, Howard Huntington/K9KM, Steve Sherman/N9LKD, Chad Kurszewski/WE9V; (Back L→R) Fred Sanborn/KG9X, Ken Willmott/KW9U, Jim Reynolds/KB9LQH, John Boos/K0HVS, Wayne Wagner/AA9DY

### Thanks to all the Club Members for a great 2005 !

What a great year this has been thanks to all the club members and officers.

### 2005 Officers:

President: Jerry Breuss, N9GGO Vice President: Keith Landowski, KC6VMM Secretary: Ken Willmott, KW9U Treasurer: Wayne Wagner, AA9DY Trustee 3yr: Howard Huntington, K9KM Trustee 2yr: John Boos, K0HVS Trustee 1yr: Fred Sanborn, KG9X

#### Where to obtain information:

See the MARC KM0TO club station and activities. http://marc.comm.mot.com/marc/stations/km0to/

See Compass Link: http://compass.mot.com/go/km0to

See all the clubs photos: http://www.km0to.shutterfly.com

The Club's monthly meetings are on the 2nd Wednesday at noon. Each Wednesday we meet for lunch in the cafeteria to share the common interest in our hobby.